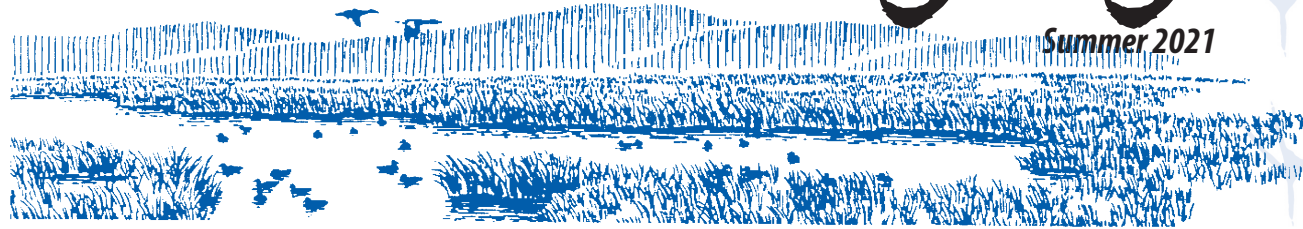


The Flyway

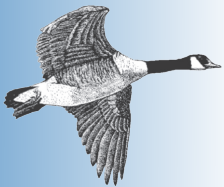
Summer 2021



Quarterly newsletter for Billy Frank Jr. Nisqually and Grays Harbor National Wildlife Refuges

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Save the Date!

The Nisqually Watershed Festival will be held Saturday, September 25th. Details will be posted to the Refuge website and Facebook!

The Weasel on the Boardwalk

*By David True,
Park Ranger Nisqually NWR Complex*

On one of my days off this spring, I visited Billy Frank Jr. Nisqually National Wildlife Refuge and walked the one-mile Twin Barns Loop Trail in hope of finding some migrant song-birds along the trail. As I approached the section near where the picnic tables are located, I observed a flash of orange-brown in the corner of my eye running on the side of the boardwalk. Quickly I readied my camera with the hope that the creature would miraculously pop out, to provide me the photo of a lifetime! But rarely does this happen when it comes to observing a Long-tailed Weasel.

I was in luck this day! The weasel captured a Townsend's Mole off the boardwalk but in its haste to avoid some of the people along the boardwalk, the weasel dropped the mole on the boardwalk and briefly left the area. Guessing that the little predator would come back for its prey, I waited a minute at an appropriate distance to avoid bothering the animal. Sure enough the weasel came back, picked up its food and scurried along its way. And so it goes with observing one of our most interesting predators found on the Refuge.

Long-tailed Weasels (*Mustela frenata*) belong to a family of carnivores called Mustelidae, which includes over 50 species around the world and includes such iconic animals such as otters,

mink, badgers and wolverines. At Nisqually, a visitor may glimpse a few of these species, such as river otters and mink, particularly around wetlands.

Long-tailed Weasels, although they can swim, are

more likely to be found along wooded areas and brushy spots. The Twin Barns Loop Trail is a great place to try to spot a weasel, especially right by the Twin Barns.

Not much bigger than an eastern gray squirrel, Long-tailed Weasels grow to a little over a foot in length. Their tails comprise about 50 % of their length. Weasels, like all of the mustelids, have a strong scent gland, which they use for defense and marking their territories. This smell is not as pungent as a skunk, and weasels can't spray like skunks either. (Did you know that skunks are not considered part of the mustelid family anymore? Most scientists that study skunks have put them in their own family, Mephitidae.) Still any smell may help the weasel from being

Continued on next page



Long tailed Weasel, photo by David True.

The Clarice McCartan Award Recipients for 2019 and 2020

*By Sheila McCartan,
Friends of Nisqually NWR
Complex board member and
Clarice McCartan's daughter*

The Clarice McCartan Friend of the Nisqually Award was established in 2015 to recognize individuals who have contributed significantly to the mission of Billy Frank Jr. Nisqually National Wildlife Refuge. Past award recipients have included both Refuge staff and volunteers.

2019 Award Recipients: Carolyn and Rob Barlow

It is with great pleasure the Friends of Nisqually NWR Complex award Carolyn and Rob Barlow with the Clarice McCartan Award. The Barlow's assumed the role as the Refuge Nature Shop Managers in August 2014. Since that time, they have run the Nature Shop with untiring effort and exceptional attention to detail. They worked with or without assistance in maintaining sufficient inventory, good quality, and a great variety of not only books but a variety of other merchandise as well. Sales from the Nature Shop provide an important source of income for the Friends and proceeds help fund Refuge programs. This all-volunteer effort also included the planning and running the Nature Shop extension during the Spring Shorebird and Nature Festival at Grays Harbor NWR each year. This event has always done exceptional sales and the Barlow's and other

Weasel

From page 1

captured by larger predators, such as coyotes. Weasels can be quite aggressive and will often prey on animals larger than themselves, although most of the time they prey on smaller animals. Generally when they find prey, they will attempt to attack the animal quickly and bite it around the back of the neck. Weasels generally hunt at night, but they will sometimes hunt in daylight when they desire.

The life of a weasel is not easy, and for most Long-tailed Weasels, living over two years old in the wild is considered fairly good! With such a short lifespan, weasels

volunteers working the sales table also provide loads of additional information to the browsing public.

2020 Award Recipient: Art Pavey

After completing his career with the phone company in Pierce County in the early 1990's, Art joined the

Refuge's Volunteer Program in 1993. He is truly one of the "old timers". Art's commitment to the Refuge has been as long as some careers and his list of contributions is lengthy. Art is a generalist volunteer meaning he works with all Refuge programs. He organized years of nest box cleaning, and participated in eagle nest data collection, invasive plant and animal control, revegetation projects, and surveys.



Art Pavey, Sheila McCartan, Carolyn Barlow, Rob Barlow

Office work included fee counting and mailings. Art's biggest contributions, though, have been with Visitor Services and here, Art has done almost everything not once or twice, but for years. This includes weekly shifts in the Visitor Center (and the Twin Barns before that!), giving interpretive walks, helping with the Summer Lecture Series, trail roving, and helping at special events including the Nisqually Watershed Festival and the Grays Harbor Shorebird and Nature Festival. He helped run the state-wide Federal Junior Duck Stamp Program for 20 years. Art has provided countless photographs to the Refuge's photo library. He has not missed a volunteer training, social event, or special event. He is well known amongst Refuge visitors and volunteers and makes a point of greeting everyone. Art's contributions to the Refuge have truly been significant and we congratulate him on receiving this well deserved award. ✧



compensate by having large litters in springtime -- a litter is normally around six kits. In about two months, the young weasels have learned to hunt from their mother and can start hunting on their own.

Observing a Long-tailed Weasel always generates excitement with the viewing public. While out exploring the Refuge, see if you can find one of these amazing animals. Billy Frank Jr. Nisqually National Wildlife Refuge is one of the better places for spotting them! ✧

2021 Summer Lecture Series

The 34th Annual Summer Lecture Series at Billy Frank Jr. Nisqually NWR will be held entirely virtually! To register, visit the Friends of Nisqually NWR Complex website. www.friendsofnisquallynwr.org

All lectures are free and will take place Wednesday evenings at 7:00 p.m. in July and August. Thanks to Friends of Nisqually NWR Complex for their continued support of the summer lecture series.

July 7

Long Live the Kings— From Science to Action, Advancing Salmon Recovery in the Northwest

Jacques White

“The loss of salmon threatens the heart of Pacific Northwest culture, a multi-billion-dollar fishing industry, the health of our local sea including our iconic southern resident killer whales and deeply rooted Native American rights and traditions. Long Live the Kings is working on the Salish Sea Marine Survival Project and other critically important efforts to address these challenges, uniting over 200 partners to determine what controls salmon and steelhead productivity and to devise and implement effective strategies to bring them back for the long run.”

Jacques White is Executive Director of Long Live the Kings, a non-profit organization dedicated to restoring salmon and steelhead to Puget Sound. Jacques works to recover salmon and support sustainable fishing.

July 14

European Green Crab in Washington

Amy Linhart

Invasive European green crab are becoming an increasing concern across the state of Washington. This presentation will dive into the history and current status of the European green crab in the state and will provide an update on how collaborative partnerships are responding.

Amy Linhart is the Crab Team Coordinator for Washington Sea Grant's Crab Team and works closely with volunteers and partners to keep this collaborative monitoring program moving forward. With a background in biology and a Masters in Marine Affairs, Amy has a keen interest in broadening community participation in local environmental science efforts.

July 21

Wolves are back!

Faye Peebles

After being absent since the 1930s and 40s in the Pacific Northwest (PNW), wolves have returned. Where are they and how are they surviving? How are they affecting the people who live in here? Learn all this and more during this PNW- focused program.

Learning about wolves since she was introduced to them at the age of 9, **Faye Peebles** now helps others learn about them. She became the Education Coordinator for Wolf Haven International five years ago and has lived in Washington since before wolves came back to the state. Faye enjoys sharing knowledge and continuing to learn from others about wolves, both captive and wild, with learners of all ages.

July 28

Climate Action through Art: Out of Apathy and Into Action!

Carrie Ziegler

In this talk, Artist, Speaker, and Community Engagement Expert **Carrie Ziegler** will share inspiring collaborative art and climate action stories.

Together we will explore the transformative power of collaborative art and its capacity to create change, both in us as individuals and in the communities we are part of.

Recently, one of Carrie's collaborative art in action projects contributed to the passing of the Thurston Climate Mitigation Plan AND a resolution stating we are in a Climate Emergency. Carrie has worked with many organizations and people who are struggling with apathy and lack of hope in light of all of the environmental injustices in the world. When they create art around these issues, collaboratively with other people, they are rocketed out of apathy and into action. I am excited to help YOU create the change you envision in this world.



August 4

Eye to Eye—Encounters with the Remarkable Olympic Marmot

Richard Klavitter

Through photographs and individual accounts of marmots Richard Klavitter has observed over the last decade and a half, the life an Olympic marmot lives and its natural history will be illustrated.

As a now retired physical therapist, **Richard Klavitter's** study of the Olympic marmot has been a long standing avocation. What started with the observation of a marmot pup yawning among its litter mates in the summer of 1999, continued with solo 12 mile spring-time snowshoe treks over 10 feet of snow to catch the animals' first emergence for the season, to being the anesthesiologist assisting the wildlife veterinarian in implantation of radio transmitters in marmot abdomens, to presenting the natural history of the marmot for the Olympic National Park's citizen science marmot study. And along the way, there have been photographs taken. When his wife would ask how many more pictures of marmots he needed, his response was: one more.

August 11

Cougars as Ecological Brokers

Mark Elbroch

Cougars—also known as mountain lions, pumas, and Florida panthers—are among the most iconic carnivores in the Americas. Join Mark in an exploration of the cougar's relationships with other flora and fauna. Learn how cougars act as ecological brokers of energy and nutrients for so many other species, and that cougars support biodiversity and ecological resilience. In other words, learn how cougars support healthy human communities and healthy landscapes in which humans can thrive.

Mark Elbroch is a father, writer and mountain lion biologist. He is the Director of the Puma Program for Panthera, the global wild cat science and conservation organization (panthera.org). His latest book is *The Cougar Conundrum*. More about mark can be found at markelbroch.com.

August 18

After the Blast: The Ecological Recovery of Mount St. Helens

Eric Wagner

On May 18, 1980, the world watched when Mount St. Helens erupted in southwestern Washington, killing 57 people and destroying hundreds of square miles of land. Scientists thought it would take years for life to

return, but the first ecologists to visit the blast zone a couple of weeks after the blast were stunned to find plants already pushing up through the ash and animals skittering around. Mount St. Helens has been surprising ecologists ever since, and this talk will explore how the eruption prompted scientists to think in new ways about how life responds to seemingly total devastation.

Eric Wagner is a writer in Seattle, where he lives with his family. In addition to *After the Blast*, he is the author of *Once and Future River: Reclaiming the Duwamish*, and *Penguins in the Desert*. His essays and journalism have appeared in the *Atlantic*, *Audubon*, *High Country News*, and *Orion*, among other places, and he has a Ph.D. in Biology from the University of Washington for his work on Magellanic Penguins in Argentina.

August 25

Arsenic and Old Lakes: A Pollution Legacy that Won't Go Away!

James Gawel

Arsenic contamination of lakes in the US has occurred as a result of mining, smelting, and its use as an aquatic herbicide and terrestrial pesticide. This carcinogen, which has accumulated in Puget Sound lakes affected by the former ASARCO smelter in Ruston, WA, can be mobilized from lake sediments during the summer, but in most lakes there is a spatial separation between dissolved arsenic and oxygen-requiring organisms, reducing the potential for biotic uptake. Now our team of collaborators (UW Tacoma and Seattle faculty and current and former students) has elucidated the mechanisms by which arsenic in the sediments of shallow, urban lakes is transported into surface waters, resulting in significant bioaccumulation of arsenic in aquatic species, and an increased cancer risk for high-consuming populations.

Dr. Jim Gawel is Associate Professor of environmental chemistry and engineering at University of Washington Tacoma, where he has taught and conducted research with undergraduates for 22 years. He received his B.S. in Civil Engineering from Brown University and his Ph.D. in Environmental Engineering from MIT. He has studied metal chemistry and its biological effects in trees in Canada and the mountains of New England and Norway, in lakes in Massachusetts and Washington, and in mussels and worms in Puget Sound. For his research, Jim has given blood (unwillingly) to thousands of black flies, he has had to remove leaches from his feet multiple times, and he has had to hitchhike with tourists and their schnauzers in a Winnebago to get back to his vehicle.

<http://friendsofnisquallynwrc.org/summer-lecture-series/> for more details ✨

Swallows All Around!

By Kim Adelson,
Friends of Nisqually NWR Complex board member

Because insect-eating swallows are here only during the warmer months, they always represent spring and summer to me. Seven of the nine North American species of swallows can be found on the Refuge, but five—tree, violet-green, barn, cliff and northern rough-winged swallows—are more commonly spotted. (Check out the Norm Dicks Visitor Center and the Twin Barns for up close viewing!) While it is easy to know that the bird you are viewing is a swallow—they have such a distinctive shape—it can be a little more challenging to tell the different species apart.

In many ways, all swallows are similar. They are aerodynamic, swift-flying birds who feed almost exclusively by catching insects on the wing. Swallows are slender and have long, pointed wings which help them maneuver to catch their small prey. Drinking on the wing while skimming over open water is another amazing in-flight swallow trick. They have large eyes and very acute vision, better than that of most other birds. (It is hard to see a mosquito when you're traveling at 25 mph!) They have short, wide bills, the better to scoop up flies and gnats. Swallows form monogamous pairs, and the males greatly contribute to rearing their helpless young. They need wide open spaces to catch their dinner, and so are usually found in areas of low vegetation, especially those near water. To varying degrees, all swallows are social and found in flocks. They are not closely related to swifts and nightjars, the other birds that catch insects during sustained flight.

Tree and Violet-green Swallows are genetically similar. Tree Swallows, found across the U.S., are a vivid cobalt blue above and a brilliant white below when mature; juveniles are brown above. They have a black eye-mask, black primary (wing) feathers and a slightly notched tail. The cobalt-blue color extends below their eyes, and they have very small white "saddlebags" near their rumps. They tend to fly reasonably low to the ground (less than 50 feet high) and have slower wing beats than other swallows. We call them "tree swallows" because they nest in tree cavities; they do not excavate

these cavities but instead use old woodpecker holes or naturally rotted-out sections. (They may also use man-made nest boxes.)

In contrast, Violet-green Swallows are birds of the American West. If they are perched in good light, they can easily be distinguished from Tree Swallows by their green (upper) and violet (lower) backs. However, in poorer light both Tree and Violet-green Swallows may simply look "dark" or black. How, then, to tell them

apart? In Violet-greens, the white on the throat extends above the eyes; also, they have much larger white rump patches than Tree Swallows. In addition, Violet-greens Swallows have longer wings which project past their tail feathers. Like Tree Swallows, they are cavity nesters.

Although not closely related, Barn and Cliff Swallows look rather like each other. These two are our only local swallows to have red/rust on the necks and heads; that color extends into the breast only in Barn Swallows. Both build their nests out of mud, with the Cliff Swallows being more pendulous

than the more cup-like structure that the Barn Swallows build. They are both very content to build their nests on human structures (bridges, buildings). Ironically, the Refuge's Barn Swallows prefer the Norm Dicks Visitor Center to the Twin Barns! The two species can be distinguished by the fact that only Cliff Swallows have a white "headlamp" on their foreheads, and also because Barn Swallows have dramatically forked tails, whereas Cliff Swallows have squared-off tails.

Northern Rough-winged Swallows are the Plain Janes of Refuge swallows: they are entirely brown above and dirty-white below. Their tail is square. They tend to feed by flying low over water and can be found across the U.S. in areas near water. Rough-winged Swallows nest in cavities or burrows made and abandoned by other animals and are less social than other swallows.

Sadly, the populations of all these species have been decreasing in size since the 1970s. The decline in the insects that they rely upon for food is most likely the cause of their dwindling. It is fortunate there are places like the Refuge which welcome them and in which they can thrive! ✈



Barn swallow, photo by i'ina Van Lawick

Melody Mayer Gift That Will Keep on Giving

*By Justin Hall, President of
Friends of Nisqually NWR Complex*

In 2020 the Friends of the Nisqually National Wildlife Refuge Complex received a transformative gift from the estate of Melody Mayer.

Melody and her husband William “Bill” Scheidt, who passed away a few months before Melody, loved the outdoors and were avid bicyclists and hikers and climbers. They spent countless hours and tens of thousands of miles on their tandem bike. Both Melody and Bill often participated in the Wednesday bird walks and had a love of the Billy Frank Jr. Nisqually NWR. They were concerned about protecting the natural world they thrived in. We are extremely honored by their gift and are pleased that we will be able to use it help educate people about the Refuge and the natural world.

The Friends work to support the Refuge Complex, in particular the education program, and we usually raise funds through sales at the Nature Shop along with memberships and donations. Of course, during



Melody and Bill Scheidt, just one outdoor adventure

2020 and so far into 2021, the Nature Shop has been closed. During this time, we have been able to continue funding the education program through our reserves, through the incredible generosity of increased donations and memberships from people like you, and

through this gift. The gift is transformative because we will be able to support the education program at a higher level from here forward.

We are currently exploring options to invest the majority of this gift so that we will have a quasi-endowment that will allow us to increase our support to the Refuge Complex in perpetuity. We have used some of the funds to assist with the rejuvenation of the Nature Explore Area. The current long-term plan for the funds is to provide the living wage tier for the AmeriCorps members that work

at Nisqually and Grays Harbor to further support the Refuge Complex’s Education Program.

While this gift came as a wonderful total surprise to us, if you would like to include the Friends in planned giving, please reach out to us at info@friendsofnisquallynwr.org and we would be happy to talk with you. ✎

Environmental Education Update

*By Davy Clark,
Education Program Manager,
Billy Frank Jr. Nisqually National Wildlife Refuge*

This spring, the Refuge was able to provide virtual programming for over 1,300 elementary students. Refuge educators conducted virtual owl pellet dissections, virtual aquatic invertebrate labs and provided interactive videos about the Nisqually Watershed. But even more exciting than reaching students virtually has been the return of school groups visiting the Refuge in-person. We’ve always believed that when students visit the Refuge for a field trip they are stepping into a very special kind of classroom; one without walls, and one where something amazing is always around the next bend in the trail. We are thrilled to welcome students back to

the Refuge and are supporting teachers in planning self-guided field trips for the time being.

As we prepare for a return to offering in-person programming we are also thrilled to have a new addition to the Environmental Education Center. Artist Carrie Ziegler has recently wrapped up her work on a second mural in the Environmental Education Center that highlights the freshwater wetlands found at the Refuge. These habitats that are vital for wildlife are also at the heart of what Refuge educators teach and explore with visiting students. This mural will be used as a teaching aid and is sure to stoke the imagination and curiosity of the many students who visit the Refuge as part of a field trip each year. ✎



New and Renewing Friends Members, Summer 2021

Student/Senior—\$15

Olivia Brown
Mary Lee Collins
Peter V. Kilburn
Gretchen Marble
Carol Rybolt

Individual—\$25

Karen Cunniff
Alfred Rettenmier

Family—\$50

Narada Pierce & Russ Cahill
Katherine Fleming &
Brian McIntosh
Lydia Schoen

Supporting—\$100

Nancy Alden
Larry & Peggy Erickson
Kristin Knopf &
Brian Hanners
Steven Macdonald
Ellen Madsen

Partner—\$250

Louis Malcom
Agal & Diane Oberquell

Benefactor—\$1000

Bette Maron

**Friends of Nisqually
NWR Complex** is a
501(c)(3) nonprofit organization
established in 1998
to promote conservation
of the natural and cultural
resources and fund educational
and outreach programs at
**Nisqually National Wildlife
Refuge Complex.**



Join Friends of Nisqually NWRC!

Name _____

Address _____

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- ☐ Please send information on making Friends of Nisqually NWRC a beneficiary of my estate.
☐ Check here to receive an electronic version of *The Flyway* newsletter by email.

Individual/Family Memberships

- ☐ \$15 Student/Senior
☐ \$25 Individual
☐ \$50 Family
☐ \$100 Supporting
☐ \$250 Partner
☐ \$500 Patron
☐ \$1000 Benefactor

Corporate/Business Memberships

- ☐ \$250 Business Sponsor
☐ \$500 Community Partner
☐ \$1000 Sustaining Business
☐ \$2500 Corporate Patron
☐ \$5000 + Corporate Benefactor

Please make checks payable to: Friends of Nisqually NWRC, 100 Brown Farm Rd, Olympia, WA 98516

Your tax deductible contribution will help preserve the unique habitats, fish, and wildlife of the Nisqually Delta and the Grays Harbor Tideflats.

OFFICE USE Rec'd _____ Mo _____ New _____ Renew _____ Ent _____ Mld _____

**Friends of Nisqually National
Wildlife Refuge Complex**

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... conserving, protecting and enhancing fish, wildlife and plants and their habitats for the continuing benefit of the American people...

**Refuge Seeks two Environmental Educators for
10.5 month AmeriCorps Term of Service!**



*AmeriCorps members collecting invertebrates to explore
with local school students*

Billy Frank Jr. Nisqually and Grays Harbor National Wildlife Refuges are currently recruiting for two AmeriCorps education coordinators. Serve your community by connecting kids and nature! Share the wonders of wildlife with the next generation! Inspire future conservationists!

Interested in applying?

Visit my.americorps.gov and
search BFJ Nisqually, or
Grays Harbor

